

What is claimed is:

Sub 5

1. A method comprising:
 enrolling a customer in a messaging and alert service;
 storing a list of businesses selected by the customer;
 storing a customer contact hierarchy list; and
 contacting the customer according to the customer contact hierarchy when at least one of the selected businesses has an alert for the customer.

10 2. The method of claim 1 wherein a customer enrolls by providing information to at least one of a participating business website, a customer messaging and alert service website, and to a customer services representative.

15 3. The method of claim 2 wherein the customer contact hierarchy list includes at least one of telephone information, instant messaging information, e-mail information, pager information and wireless device information.

20 4. The method of claim 1 further comprising storing a list of customer preferences that include at least one of selected businesses to contact, selected businesses authorized to send alert messages, when the customer may be contacted and types of messages that require confirmation.

25 5. The method of claim 1 further comprising permitting the customer to contact any of the selected businesses.

6. The method of claim 5 wherein the customer submits a natural language query that is interpreted by the messaging and alert service.

30 7. An article comprising a computer-readable medium that stores computer executable instructions for a messaging and alerting system, the instructions causing a computer to:

enroll a customer in the messaging and alert service;
store a list of businesses selected by the customer;
store a customer contact hierarchy list; and
contact the customer according to the customer contact hierarchy when at least
5 one of the selected businesses has an alert for the customer.

8. The article of claim 7, the instructions further causing a computer to enroll a
customer by requiring the customer to provide information to at least one of a
participating business website, a customer messaging and alert service website, and to a
customer services representative.

9. The article of claim 8, the instructions further causing a computer to store data
pertaining to the customer contact hierarchy list that includes at least one of telephone
information, instant messaging information, pager information and wireless device
15 information.

10. The article of claim 7, the instructions further causing a computer to store data
pertaining to a list of customer preferences that include at least one of selected businesses
to contact, selected businesses authorized to send alert messages, when the customer may
20 be contacted and types of messages that require confirmation.

11. The article of claim 7, the instructions further causing a computer to permit the
customer to contact any of the selected businesses.

12. The article of claim 7, the instructions further causing a computer to interpret a
natural language query submitted by the customer.

13. A method comprising:
providing a customer messaging and alert service (CMAS) for use by customers;
30 permitting a customer to enroll in the CMAS and to authorize at least one
business, selected from a group of affiliated businesses, to contact the customer;

permitting the customer to specify a contact hierarchy list of communication types;
monitoring the chosen businesses with a CMAS engine; and
alerting the customer when an authorized business has a message by attempting to
5 contact the customer according to that customer's hierarchy list.

14. The method of claim 13, wherein the communication types include at least one of instant messaging, e-mail, telephone service, short-messaging system messages, wireless calls, and voice messaging.

10 15. The method of claim 13, further comprising contacting a business that sent an alert when the customer acknowledges receipt of the alert.

16. The method of claim 13 further comprising permitting the customer to contact any
15 of the affiliated businesses.

17. The method of claim 16 wherein the customer submits a natural language query that is interpreted by the CMAS.

20 18. The method of claim 17 wherein CMAS utilizes at least one dataset of customer intent data to interpret the natural language query .

19. The method of claim 18 wherein the customer intent data is enterprise specific.

25 20. The method of claim 17 further comprising tracking the natural language queries.

21. The method of claim 13 wherein a customer enrolls by providing information to at least one of a participating business website, a customer messaging and alert service website, and to a customer services representative.

22. The method of claim 13 wherein the customer contact hierarchy list includes at least one of telephone information, instant messaging information, e-mail information, pager information and wireless device information.

5 23. The method of claim 13 further comprising storing a list of customer preferences that include at least one of selected businesses to contact, selected businesses authorized to send alert messages, when the customer may be contacted and types of messages that require confirmation.

10 24. The method of claim 13 further comprising generating reports for use by the affiliated businesses.

25. The method of claim 24 wherein the reports include at least one of completed transaction summaries, peak number of transactions by channel, transaction failure by channel, transaction frequency by channel, and customer intent, transaction summary by customer intent and channel, and transaction failure by customer intent.

26. An article comprising a computer-readable medium that stores computer executable instructions for a customer messaging and alerting system, the instructions causing a computer to:

- offer a customer messaging and alert service (CMAS) for use by customers;
- permit a customer to enroll in the CMAS and to authorize at least one business, selected from a group of affiliated businesses, to contact the customer;
- permit the customer to specify a contact hierarchy list of communication types;
- monitor the chosen businesses with a CMAS engine; and
- alert the customer when an authorized business has a message by attempting to contact the customer according to that customer's hierarchy list.

27. The article of claim 26, the instructions further causing a computer to respond to communication data in the form of at least one of instant messages, e-mail, telephone calls, short-messaging system messages, wireless calls, and voice messages.

28. The article of claim 26, the instructions further causing a computer to contact a business that sent an alert when the customer acknowledges receipt of the alert.

5 29. The article of claim 26, the instructions further causing a computer to permit the customer to contact any of the affiliated businesses.

30. The article of claim 29, the instructions further causing a computer to interpret a natural language query submitted by the customer.

10 31. The article of claim 30, the instructions further causing a computer to utilize at least one dataset of customer intent data to interpret the natural language query.

15 32. The article of claim 31, the instructions further causing a computer to utilize enterprise specific customer intent data.

33. The article of claim 30, the instructions further causing a computer to track the natural language queries.

20 34. The article of claim 26, the instructions further causing a computer to enroll a customer when information is provided to at least one of a participating business website, a customer messaging and alert service website, and to a customer services representative.

25 35. The article of claim 26, the instructions further causing a computer to store customer contact hierarchy data that includes at least one of telephone information, instant messaging information, e-mail information, pager information and wireless device information.

30 36. The method of claim 26 further comprising storing a list of customer preferences that include at least one of selected businesses to contact, selected businesses authorized

to send alert messages, when the customer may be contacted and types of messages that require confirmation.

5 37. The article of claim 26, the instructions further causing a computer to generate reports for use by the affiliated businesses.

38. The article of claim 37, the instructions further causing a computer to generate reports that include at least one of completed transaction summaries, peak number of
10 transactions by channel, transaction failure by channel, transaction frequency by channel, and customer intent, transaction summary by customer intent and channel, and transaction failure by customer intent.

39. A method comprising:

15 enrolling in a customer messaging and alert service that includes a plurality of businesses;

forming a query for a business;

receiving a response from the business; and

receiving alert messages from at least one business.

20 40. The method of claim 39 wherein enrolling includes at least one of selecting those businesses that are authorized for responding to queries, selecting those businesses authorized to send alert messages, generating a contact hierarchy list, and specifying preferences.

25 41. The method of claim 40 wherein the list of preferences includes at least one of when communications can be initiated, and the types of messages that require confirmation.

42. The method of claim 40 wherein the contact hierarchy list includes at least one of telephone information, instant messaging information, pager information and wireless device information.

5 43. The method of claim 39 wherein enrolling includes providing information to at least one of a participating business website, a customer messaging and alert service website, and to a customer services representative.

10 44. The method of claim 39 wherein forming a query comprises submitting a natural language query that is interpreted by the messaging and alert service.

15 45. An article comprising a computer-readable medium that stores computer executable instructions for a messaging and alerting system, the instructions permitting a customer to:

- enroll in a customer messaging and alert service that includes a plurality of businesses;
- form a query for a business;
- receive a response from the business; and
- receive alert messages from at least one business.

20 46. The article of claim 45, the instructions further enabling the customer to select at least one of those businesses that are authorized for responding to queries, those businesses authorized to send alert messages, the types of contact devices suitable for communication and preferences.

25 47. The article of claim 46, the instructions further causing storing of customer preferences that include at least one of when communications can be initiated, and the types of messages that require confirmation.

48. The article of claim 46, the instructions further causing storing of at least one of customer telephone information, instant messaging information, pager information and wireless device information in a customer contact hierarchy list.

49. The article of claim 45, the instructions further enabling the customer to enroll by providing information to at least one of a participating business website, a customer messaging and alert service website, and to a customer services representative.

50. The article of claim 45, the instructions further enabling the customer to submit a natural language query that is interpreted by the messaging and alert service.

51. ~~A customer messaging and alerting system comprising:~~
a customer messaging and alerting service (CMAS) architecture;
a device interface connected to the CMAS architecture and operable to receive
communications from, and transmit communications to, customers;
message oriented middleware connected to the CMAS architecture and to a
business services database; and
contact center integration middleware connected to the CMAS architecture and to
a contact center;
wherein the CMAS architecture permits a customer to choose which affiliated
companies are authorized to communicate with the customer, and to chose a hierarchy of
communication types.

52. The apparatus of claim 51, wherein the communication types include at least one of a cellphone, regular wire-line telephone, a personal computer, an interactive pager and a personal digital assistant.

53. The apparatus of claim 51 wherein the CMAS architecture includes a natural language processor that interprets customer messages based on predefined customer intents.

54. The apparatus of claim 51 wherein the CMAS architecture includes content manager means for managing message content and format from both customers and from businesses.

5 55. The apparatus of claim 54 wherein the content manager means includes content templates.

56. A customer messaging and alerting system comprising:
 means for enrolling a customer in a messaging and alert service;
 10 means for storing a list of businesses selected by the customer;
 means for storing a customer contact hierarchy list; and
 means for contacting the customer according to the customer contact hierarchy
 when at least one of the selected businesses has an alert for the customer

15 57. The apparatus of claim 56, wherein the customer contact hierarchy includes communication types of at least one of a cell phone, a regular wire-line telephone, a personal computer, and a personal digital assistant.

20 58. The apparatus of claim 56 further comprising a natural language processing means for interpreting customer messages based on predefined customer intents.

59. The apparatus of claim 56 further comprising a content manager means for managing message content and format from both customers and from businesses.

25 60. The apparatus of claim 59 wherein the content manager means includes content templates.

61. A method comprising:
 receiving a customer message from a wireless application protocol (WAP)
 30 telephone;
 retrieving customer information from a database;

writing customer call and identification data to a second database;
sending a message for display on the WAP telephone's display screen; and
processing a voice telephone call from the customer based on the customer call
and identification data in the second database.

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62. The method of claim 61 further comprising providing a screen pop to a customer
service representative.

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63. The method of claim 61 wherein the screen pop includes at least one of customer
identification data and customer center calling history data.